#### REMARKS

## Claim Rejections 35 U.S.C. § 103 (a)

The Examiner has rejected claims 1-30 under 35 U.S.C. §103 (a) as being unpatentable over <u>Sewell</u> (U.S. 6,809,794) in view of <u>Szmanda et al.</u> (U.S. 6,787,286).

Applicants respectfully disagree with the Examiner. Applicants have amended claims 1, 13, 18, and 27. Support is provided in paragraphs [0021] - [0037] of the specification.

### **Claims 1-12**

Claim 1, as amended, of Applicants' claimed invention claims a method (200) including: determining an index-matching liquid (205); determining a set of one or more constituents based on the index-matching liquid (210); providing a photoresist; adding the set of one or more constituents to the photoresist (215); and altering liquid-contact properties of the photoresist, the properties including density, wet ability, and molecular organization. See Figure 2.

In contrast, a combination of the method of <u>Szmanda et al.</u> and the method of <u>Sewell</u> would still not produce the method of Applicants' claimed invention, as claimed in claim 1, as amended. Consequently, the two cited references, whether

Serial No.: 10/688,109

individually or collectively, do not render obvious claim 1, as amended, of Applicants' claimed invention.

Claims 2-12 are dependent on claim 1. A combination of the method of <u>Szmanda et al.</u> and the method of <u>Sewell</u> would still not produce the method of Applicants' claimed invention, as claimed in claims 2-12.

Consequently, the two cited references, whether individually or collectively, do not render obvious claims 2-12, as amended, of Applicants' claimed invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 1-12 under 35 U.S.C. §103 (a).

# Claims 13-26

Claim 13, as amended, of Applicants' claimed invention claims an apparatus (300) including: a substrate (301); a photoresist (302) deposited on the substrate, the photoresist having incorporated therein one or more additives that improve liquid-contact properties of the photoresist; an index-matching liquid (303) located in contact with the photoresist; and a last lens element (304) located in contact with the index-matching liquid. See Figure 3.

In contrast, a combination of the apparatus of <u>Szmanda et al.</u> and the apparatus of <u>Sewell</u> would still not produce the apparatus of Applicants' claimed invention, as claimed in claim 13, as amended. Consequently, the two cited references, whether individually or collectively, do not render obvious claim 13, as amended, of Applicants' claimed invention.

Claims 14-26 are dependent on claim 13. A combination of the method of <u>Szmanda et al.</u> and the method of <u>Sewell</u> would still not produce the method of Applicants' claimed invention, as claimed in claims 14-26.

Consequently, the two cited references, whether individually or collectively, do not render obvious claims 14-26, as amended, of Applicants' claimed invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 13-26 under 35 U.S.C. §103 (a).

### **Claims 27-30**

Claim 27, as amended, of Applicants' claimed invention claims a system (400) including: a last lens element (404) of a lithography exposure system, the last lens element having a specific index of refraction; an index-matching liquid (403) in contact with the last lens element, the index-matching liquid having an index of refraction equal to the specific index of refraction to within a specified tolerance; and a photoresist layer (402) in contact with the index-matching liquid, the photoresist layer composed of photoresist having incorporated therein one or more constituents that improve liquid-contact properties between the index-matching liquid and the photoresist layer. See Figure 4.

In contrast, a combination of the system of <u>Szmanda et al.</u> and the system of <u>Sewell</u> would still not produce the system of Applicants' claimed invention, as claimed in claim 27, as amended. Consequently, the two cited references, whether

individually or collectively, do not render obvious claim 27, as amended, of Applicants' claimed invention.

Claims 28-30 are dependent on claim 27. A combination of the system of <u>Szmanda et al.</u> and the system of <u>Sewell</u> would still not produce the system of Applicants' claimed invention, as claimed in claims 28-30.

Consequently, the two cited references, whether individually or collectively, do not render obvious claims 28-30, as amended, of Applicants' claimed invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 27-30 under 35 U.S.C. §103 (a).

## **Conclusion**

Applicants believe that all claims pending, including claims 1-30, are now in condition for allowance so such action is earnestly solicited at the earliest possible date.

Pursuant to 37 C.F.R. 1.136 (a) (3), Applicants hereby request and authorize the U.S. Patent and Trademark Office to treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time.

Should there be any additional charge or fee, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, please charge Deposit Account No. 50-0221.

If a telephone interview would in any way expedite the prosecution of this application, the Examiner is invited to contact the undersigned at (408) 720-8300.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: \_\_/October 17/\_\_\_, 2006 \_\_\_/George Chen/ George Chen Reg. No. 50,807

12400 Wilshire Boulevard Seventh Floor Los Angeles, CA 90025-1026 (408) 720-8300